Immunohistochemical Observation of Notch Signaling in a Case of Calcifying Cystic Odontogenic Tumor

Type:

Abstract:
Odontogenesis is a complex biological process both with epithelial and mesenchymal tissues, and this process directly reflects the development of odontogenic neoplasms. Therefore, we have examined Notch signaling in a case of calcifying cystic odontogenic tumor, with ameloblastic fibroma and odontogenic myxoma cases as controls. In these specimens, Notch-positive-products were present both in the epithelial and ectomesenchymal components in the calcifying cystic odontogenic tumor and the ameloblastic fibroma case, but negative in the odontogenic myxoma case, having no odontogenic epithelial islands to IHC and ISH examinations. Therefore, the examination results suggest that Notch signaling plays some important roles in cytological differentiation or acquisition of tissue-specific characteristics between odontogenic epithelium and odontogenic ectomesenchymal tissues.

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